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Sulfolane Information:

Sulfolane, or tetrahydrothiophene 1, 1-dioxide, is a man-made industrial solvent, commonly used in gas production and oil refining. Sulfolane is also used in other manufacturing industries such as plastics, textiles, pharmaceuticals, and electronics. Despite its widespread use, the U.S. Environmental Protection Agency does not regulate sulfolane levels in drinking water. The City of North Pole has been sampling the City's drinking water supply since November of 2009. The samples are being analyzed by the DEC's Environmental Health Lab. The raw water from the City's supply wells have consistently shown very low levels of sulfolane, between 4 and 7 parts per billion (ppb). The two new wells are located out side of the contamination plume and were placed on-line in March of 2011. The city's treatment system is effective in removing the low levels of sulfolane which show up in tests of raw water. The treated water going to consumers does not have any sulfolane in it.

The health effects of sulfolane have not been studied in humans. What we know about the health effects of sulfolane comes from animal studies (e.g. rats, guinea pigs, mice). The Alaska Division of Public Health asked the federal Agency for Toxic Substances and Disease Registry (ATSDR) to help review the health effects research and advise on a recommended limit for sulfolane in drinking water. The ATSDR released their report on February 9, 2010, recommending 25 parts per billion sulfolane as the most protective level for drinking water. The report, along with a companion document prepared by the Alaska Division of Public Health can be found at the DEC website: http://dec.alaska.gov/spar/csp/sites/north-pole-refinery/sulfolane.aspx. The Alaska Division of Public Health is also preparing a health consultation, which will explain the implications of sulfolane consumption at the levels found in drinking water and recommendations for using water for other purposes. The DEC Drinking Water Program is working with the City of North Pole on long term monitoring and treatment options to ensure the long term protection of the city water supply.

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